THE PROBLEM OF DEFAULT IN A VENEREAL DISEASES CLINIC

A MEDICO-SOCIAL ANALYSIS OF 381 WOMEN PATIENTS

BY

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In 1943 the Tyneside Experimental Scheme was introduced as a measure to combat the rising incidence of venereal disease, and it took into consideration the fact that something more than medical treatment was necessary. The area covered by this scheme includes the County of Northumberland, the Tyneside area of Durham County, and the County Boroughs of Newcastle, Gateshead, Tynemouth, and South Shields. Serving the greater part of this area is the Joint Committee's Clinic, situated in the grounds of the Newcastle General Hospital, and the social department of the experimental scheme operates from there. While the scheme was primarily designed to persuade all women attending ante-natal clinics to have an ante-natal Wassermann examination, and also to locate contacts of venereal disease through interrogation of infected patients, it soon became obvious that default from treatment was an equally serious and important problem. This paper is an attempt to analyse the reasons for default and the efforts made to persuade defaulters to resume treatment.

Scope of the Inquiry

Three hundred and eighty-one women in default of treatment at the end of 1945 or during the first half of 1946 were selected for study. The group included 33 with congenital syphilis, and these are separately considered as their problems were different.

Acquired Infection

There were 48 single women, 230 married, 48 separated, 20 widowed, and 2 divorced (Tables I, II, and III).

Default from early treatment implies that the patient had not completed a full course of penicillin together with a course of arsenic and bismuth, or alternatively, where penicillin was not employed, at least two courses of arsenic and bismuth. A course of arsenic and bismuth consisted of 10 intravenous injections of a "914" preparation and the same number of bismuth metal injections given intramuscularly, usually at weekly intervals. Default during early surveillance means that the patient had ceased attending for observation before the end of the first year after the completion of syphilis therapy. Patients with gonorrhœa who defaulted during early surveillance ceased to co-operate some time between three weeks after the administration of penicillin and six months after the date of exposure to infection.

The outstanding feature in Table III is the large number (76 per cent.) of women suffering from early syphilis who defaulted in the early

TABLE I

AGES OF THE PATIENTS AND DIAGNOSIS (EXCLUDING CONGENITAL SYPHILITIC PATIENTS)

Age	*Early syphilis	†Latent syphilis	‡Late syphilis	Gonorrhœa	Dual infections	Total
−21	15	—	—	10	4	29
22–30	103	3	1	52	23	182
31–40	42	19	7	21	10	99
40+	12	8	9	7	2	38
Total	172	30	17	90	39	348

*Early syphilis = Patients with primary or secondary lesions and those who had asymptomatic infections of less than 4 years' duration.

†Latent syphilis = Asymptomatic patients where duration of infection exceeded 4 years.

‡Late syphilis = Clinical active infection which had reached tertiary stage or later.

TABLE II

SOURCES OF INFECTION

Source	Number
Single women who were infected ..	48
Marital infection	51
Extra-marital infection	105
Infected before marriage	32
Infected subsequently to termination of marriage	16
Source not known (married women)	96
Total	348

phase of treatment. Including those suffering from dual infections, 90·7 per cent. of syphilitic women defaulted during treatment, and the corresponding figure for those infected with gonorrhœa was 77 per cent. Obviously such a state of affairs demanded the closest attention from the medico-social unit.

Follow-up of Default.—The period of grace was determined by the nature of the disease, the amount of treatment received, and the mode of therapy employed at the time of default. No more than twenty-four hours were allowed to elapse before action was taken where a patient was receiving penicillin treatment; equally urgent was the infected female fairly advanced in pregnancy, or the highly contagious syphilitic who perhaps had attended once or twice at the most. Three or four weeks were allowed in a case under surveillance before a letter was despatched. Domiciliary visiting was the method of choice in urgent cases such as those already cited or where family circumstances or illness prevented a patient from attending regularly. It cannot be too strongly emphasized that the speed with which default was detected and followed up was the keynote to success in preventing complete default.

The amount of work required to persuade defaulters to return varied considerably in the group of 348 under review. The minimum was one letter and the maximum 14 letters and 6 visits all to one person; the average was 9·5 efforts per patient and the total efforts amounted to 1,460 letters and 1,860 domiciliary visits: 804 of the latter proved to be ineffective since the patients were not seen at home. The ratio of ineffective to effective visits was 4 to 5, and when planning work allowance had to be made for these relatively wasteful visits. In densely populated areas this was not so extravagant of time, as the visitor could call at other homes in the vicinity, but in the country districts the social worker relying on public transport could spend half a day or more on one ineffective visit. The benefits of domiciliary visiting were not restricted to the effect it had on persuading patients to return. Most patients were inclined to talk more freely in the familiar surroundings of their own homes, and the social worker was often able to gain a more reliable and complete picture of the patient's circumstances and the true difficulty in the way of her attendance. If this was a practical one it could usually be disposed of with the help of the almoner. The greatest care and tact were used by the visitors, and it was found that trouble was hardly ever caused by a visit, whereas letters, although marked "strictly confidential," were sometimes opened by others.

The Results of Social Efforts.—The records of the 348 defaulters have been analysed and their default classified under the following terms:

Initial default—defaulted once and re-attended 16
Initial and complete default—defaulted once and failed to re-attend 70
Intermediate default—defaulted twice and re-attended both times 89
Persistent default—defaulted at least three times and re-attended each time .. 51
Persistent and complete default—defaulted twice or more and failed to re-attend .. 122

In the "initial and complete" section (70 women) were included 62 who defaulted shortly after their first attendance at the clinic. It will be realized that in the "persistent" section many had defaulted repeatedly and had received frequent visits and letters after each default.

From Table IV it will be noted that 55 per cent. of these 348 women could not be persuaded to return, and that a further 4·5 per cent. are defaulting once more.

TABLE III

CLASSIFICATION ACCORDING TO THE NATURE OF INFECTION AND THE STAGE IN WHICH DEFAULT OCCURRED

Type of infection	No. of patients	Defaulted during treatment			Defaulted during surveillance
		Early		Late	
Early syphilis ..	172	126		27	19
Latent syphilis ..	30	24		4	2
Late syphilis ..	17	12		4	1
Gonorrhœa ..	90		69		21
Dual Infections: Early syphilis ..	36	33		1	2
Dual Infections: Latent syphilis ..	3	3		—	—
Dual Infections: Gonorrhœa	39		31		8

TABLE IV

THE RESPONSE TO SOCIAL EFFORTS

Results	Early syphilis	Latent syphilis	Late syphilis	Gonorrhœa	Dual infection	Total
Re-attended ..	63	12	9	33	13	130
Re-attended but defaulting periodically	12	—	2	2	—	16
Transferred ..	5	—	1	2	2	10
Complete default..	92	18	5	53	24	192
Total ..	172	30	17	90	39	348

Default during Pregnancy.—Of 8 patients who defaulted from anti-gonorrhœal treatment during pregnancy, only 2 could be persuaded to re-attend until cured.

Seventy-seven pregnant syphilitic women presented a much more serious problem, since inadequate anti-syphilitic treatment was liable to produce unfavourable results in the health of both mother and unborn offspring. In the course of assisting those defaulters in every way, it was ascertained that failure to co-operate was not attributable to illness or difficulties associated with pregnancy. Of the 14 who before their default had received adequate treatment, the outcome of pregnancy was known in 10 instances, but of the 63 whose treatment was inadequate the outcome was known only in 15 patients. Although those numbers were too small to justify any conclusions, they provided an interesting comparison. In the adequately-treated group, 2 infants died in the first year of life but 8 others were healthy. The inadequately-treated section showed a more unfavourable result, since only 3 children were healthy, 2 had congenital syphilis, 5 died in the first year of life, 1 infant was transferred, and other pregnancies terminated in 2 abortions and 2 stillbirths.

Two hundred and thirty-two of these defaulters had a history of previous pregnancies, and these were investigated and the results compared with a control group.

Only by careful autopsy examination could syphilis be excluded in the fœtus when the reasons for the unfavourable outcome of 143 pregnancies were considered. In the stillbirth and neonatal death rates syphilis usually plays an important part, a factor which was not fully appreciated as gross external evidence of the disease might not have existed.

It would be reasonable to assume that these women, remembering the unfortunate results of previous pregnancies, would co-operate better when again pregnant, especially when syphilis was known or suspected to have been responsible for those results. A number did come for anti-syphilitic treatment, but it required intensive social work to ensure regular attendance. Others defeated the most assiduous efforts of the social workers, the extent of which can be gauged from the fact that 138 letters and 181 domiciliary visits (including 65 ineffective) resulted in the co-operation of only 15 out of those 30 women. The worst

TABLE V

COMPARISON OF RESULTS OF PREVIOUS PREGNANCIES IN (a) 232 DEFAULTERS UNDER REVIEW AND (b) CONTROL SERIES

	No. of women	Total pregnancies	Disease	Outcome of pregnancy					
				Abortion	Stillbirth	Alive and well	Neonatal death	Died in 1st year of life	Congenital syphilis
Defaulters under review	179	474	Syphilis	46 (8·9%)	19 (3·7%)	373* (72·3%)	16 (3·1%)	47 (9·1%)	15 (2·9%)
	53	129	Gonorrhœa	18 (12%)	2 (1·4%)	111 (74%)	2 (1·4%)	17 (11·2%)	—
Control series	232	603	Non V.D.	27 (4·5%)	14 (2·3%)	514 (85·3%)	15 (2·5%)	32 (5·4%)	—

* These children are presumed to be free from syphilis inasmuch as 76% of them were not brought to this department for examination.

offenders were those suffering from early syphilis, since only 33 per cent. responded in spite of 102 letters and 124 visits. They showed the reluctance and lack of responsibility characteristic of all those suffering from early syphilis in this investigation.

Congenital Syphilis

Thirty-three patients with congenital syphilis were studied separately, because although their numbers are small their default may be due to other factors from those which underlie the default of patients who have acquired venereal disease. There were 21 with active lesions which would cause discomfort or pain (14 with interstitial keratitis, 4 with periostitis, 2 with neurosyphilis, and 1 with secondary manifestations). Co-operation only became a problem when these symptoms subsided.

The ages of the patients were important, as the responsibility for their default could not be laid upon those who were children, of whom some were too young to travel alone and none of whom, if not more than 16 years old, could be expected to understand the necessity for treatment. In Table VI the ages given are those of the patients at the time of their default, since this is the problem under investigation. At the time of their first attendance, 9 of the 21 with active lesions were below 16 years, but only 4 were still in this age group when they ceased attending. Of the remaining 12 patients who were without active symptoms, 4 were less than 16 years when they originally attended but only one was under 16 at the time of default. It is interesting to note that 18·5 years was the average age at which patients with interstitial keratitis first reported.

In congenital syphilis, as in all other types of syphilis, it was usually the lack of pain or discomfort and of obvious external symptoms that was the chief cause of default. Even patients who were suffering acutely when they first came and who in a short time gained relief through their treatment quickly forgot the warning and did not continue to attend.

Six stillbirths and 18 neonatal deaths were recorded in the previous pregnancy histories of 23 congenital syphilitics, all of whom had received little or no treatment.

The social work on behalf of these patients resulted in 19 re-attending, but one of these has recently defaulted again and the remaining 14 have completely defaulted. The reasons given for default were :

Other illness of the patient, or pregnancy	4
Fear of being found out	2
Fear of treatment	2
Discouragement at prospect of prolonged treatment	5
Ignorance of the seriousness of the disease	11
Objections by family	3
Family trouble	4
Miscellaneous reasons	2
	33

The social problems of patients with congenital syphilis are complex, often involving other members of the family to an even greater extent than in acquired venereal disease. For parents of children suffering from congenital syphilis there is bound to be some difficulty in giving an acceptable explanation for their need to attend when the children grow old enough to appreciate their surroundings. Unless care is exercised by the clinic staff the curiosity of the child may cause the parents grave embarrassment. It is a difficulty which can be

TABLE VI

CONGENITAL SYPHILIS—SOCIAL EFFORTS IN RELATION TO DEFAULT

Age	Clinical condition		Default during				Social efforts		
			Treatment		Surveillance		Letters	Visits	
	Active	Inactive	Early	Late	Early	Late		Effectual	Ineffectual
—16	0	5	4	1	—	—	18	15	16
17+	0	28	17	4	5	2	110	97	36

overcome, and the practice of not allowing children to wait long among other patients prevents some awkward questions, but parents may be so afraid of these questions arising that they will not take any risk and may stop coming. The default of two children could not be excused on these grounds as they were under 3 years old. The ages of the other 3 children were 5, 10, and 13 years.

Among 28 patients over 16 years of age, 23 were married and 10 of these marriages had taken place after the patients had reported at the clinic. Some had not disclosed to their husbands the fact that they were suffering from congenital syphilis and were afraid that they might be found out. Until there is a more enlightened public opinion it seems that many people will be doomed to carry this burden of fear through life.

It was hardly surprising that women who had attended for years, perhaps since early childhood, had become discouraged. It did, however, seem strange when other members of the family objected to these patients attending for treatment; sometimes it was the husband who was afraid of scandal, sometimes parents or brothers and sisters of the patient were afraid that they might be implicated. Most women with congenital syphilis had a very generous attitude to their parents, but some felt a grudge against them or, more vaguely, against life itself for its injustice.

Whilst two of these women had histories of sexual contact, there was no evidence of serious promiscuity in the whole group and none of them had any illegitimate children.

Crude and Corrected Defaulter Rates

The crude defaulter rate is the percentage of patients who default during the year, and the corrected defaulter rate is determined by deducting from the total number of defaulters those who re-attend through the efforts of the social department or are known to have attended clinics elsewhere. During 1946 the use of penicillin therapy on a large scale increased the defaulter rate in men and women patients whether they were attending with syphilis or gonorrhœa.

With the exception of men with gonorrhœa, all patients treated with penicillin had higher corrected defaulter rates than those who received treatment in other forms.

The marked difference between crude and corrected rates could be chiefly attributed to efficient social work. The results of this one aspect of medico-social work clearly support Osler's contention that such a unit is essential in a venereal diseases department.

TABLE VII

CRUDE AND CORRECTED DEFAULTER RATES OF ALL PATIENTS SUBJECTED TO PENICILLIN AND OTHER FORMS OF THERAPY DURING 1946

Disease	Sex	Penicillin-treated		All forms of therapy
		Crude	Corrected	Corrected rate
Syphilis	Male*	26·6%	8·7%	4·0%
	Female	44·6%	11·2%	5·4%
Gonorrhœa	Male*	39·6%	10·5%	11·1%
	Female	48·1%	11·4%	6·9%

* The efforts (1023) of the male social worker resulted in 625 men defaulters returning to complete treatment.

Both crude and corrected defaulter rates revealed that men co-operated better than women patients and if they defaulted they responded more readily to the efforts made to bring them back. For obvious reasons men were especially susceptible to letters, even non-committal ones. If, however, they ignored the letter the male social worker visited their homes. Fully 80 per cent. of those who were persuaded to return continued to attend until cured. The rapid disappearance of external symptoms in gonorrhœa and in early syphilis undoubtedly encouraged default, and this reason applied equally to men and women. The persistent active manifestations of late syphilis were usually strong enough incentives to attend for treatment and they discouraged default among these patients.

Women with secondary syphilis were notorious defaulters irrespective of the kind of therapy employed. This has become particularly important since the incidence of contagious syphilis among women has increased ten times in the last nine years in Tyneside. Those with primary syphilis usually came to the clinic as the contacts of their husbands who had inadvertently exposed them

to infection, and they adopted a more reasonable attitude all through the course of treatment. The patient who had already revealed the secondary stage of syphilis when she attended for the first time had waited until obvious symptoms were present. She may have unwisely refused to come for observation at her husband's request, or he may not have revealed to her the need to come, though he was interviewed repeatedly until she did report; but more likely her infection had been acquired extra-maritally and she might not have known that her consort was infected. These women were often promiscuous, and it was difficult to convince them of the necessity to attend regularly for a long period.

The corrected defaulter rates for female syphilis and gonorrhœa contrasted favourably with the high percentage (55 per cent.) of complete default among 348 women reviewed in this paper. It is clear that the latter represents the hard core of defaulters among all women attending this department with venereal infection.

Discussion

It was the need for consistent attendance during the periods of treatment and surveillance, especially the former, that constituted the difficulty for venereal diseases patients. There was almost always present in the minds of patients a sense of guilt or injury which had a strong and adverse influence on their attendances. After the initial stages of treatment in early contagious venereal disease they usually felt quite well and may not have shown any outward symptoms so that they found it difficult to appreciate the importance of persevering with treatment and even more difficult to understand that they should have continued to come until the tests of cure were completed. Default, especially in gonorrhœal patients treated with penicillin, might occur immediately after the first or second attendance for treatment, at the very end of the period of surveillance, or at any of the intermediate stages.

Reasons for Default.—There were many ingenious and varied excuses made by patients to explain their default; some were obviously irrelevant, some false; and others, although true, were only of temporary influence, for example, minor illness or bad weather. The excuses given by defaulters, the visitors' reports, and the facts known about the home circumstances have been carefully considered and an attempt made to deduce the real reasons, a list of which is appended.

No address:	
Moved—unable to locate	26
No fixed abode or false address given	4
Patient's health:	
Temporary illness	10
Chronic illness	9
Pregnancy	11
Unfavourable reaction after treatment	6
Fear:	
Of being found out	35
Of being reprimanded	3
Of treatment	2
Non co-operation:	
Irresponsible (some with low-grade intelligence)	111
Ignorance of the seriousness of the disease	50
Refused treatment	9
Temporary absence from home	6
Discouraged	3
Resented being infected	2
Domestic problems:	
Trouble in family	19
Illness of relatives	10
Objections or opposition from relatives	4
Home duties	11
Clinic attendance problems:	
Hours of work	12
Gossip in the waiting room	1
Transport, not easily accessible	4
	348

Address.—A false address was seldom given deliberately (only two examples were found in this investigation) but patients frequently failed to report a change of address and they left their former homes without arranging for correspondence to be forwarded. This may have been intentional, to avoid creditors or police, but more often it was just an oversight. Patients who had no fixed abode were quickly and irretrievably lost.

Health.—Temporary illness or pregnancy was frequently the original cause of failure to attend, and unhappily they sometimes set up a habit which it was difficult to change. Irregular attendance and finally complete default in some cases was due to chronic ill health. If

it was possible for sick patients to attend without danger to their health, transport was arranged for them; but even so some could not make the necessary effort to come. Prolonged ill health accounted for only about 2·6 per cent. of the default.

Fear.—A few of the defaulters claimed to be afraid of treatment, and some said they had not re-attended for fear of being reprimanded; but much more important, both in numbers and in effect, was the dread of being found out. The fear applied to women who were infected by their husbands, and of course still more to those who acquired the infection outside of marriage. For the latter, disclosure might have meant divorce or, for the single woman, the risk of being turned out of her home. When a wife was infected by her husband she usually forgave him, but sometimes discord occurred later if relatives discovered what had happened and interfered between them.

Patients found it difficult to account to curious relatives for having to be absent from home at frequent and regular intervals.

Non co-operation.—This was undoubtedly the core of the default problem. The irresponsibility of the woman who had become infected through her own immoral conduct was shown in her attitude to treatment; she would not attend regularly, was impervious to letters and visits, would give half a dozen contradictory excuses, and lacked either the intelligence to understand the serious implications of the disease or the will power to make any consistent effort to come regularly. Of all default, 44 per cent. was believed to be due to irresponsibility. Included in this group were 36 women who, knowing they were infected, continued to have intercourse and would not attend for treatment. Before defaulters were given up the grave risks of untreated or inadequately-treated venereal disease were explained to them; some appeared unable to understand, and some refused to be convinced.

Domestic problems. — Genuine family troubles, illness, or serious opposition from parents or husbands accounted for 12 per cent. of the default. The patient sometimes refused to permit the almoner to see the family and try to adjust her difficulty, even though they knew that she was coming for treatment, for fear of raising the subject again. Most careful explanations of the importance of treatment did not always outweigh the immediate unhappiness they expected would result from insistence upon attending.

Clinic attendance problems.—A very small number, only 4 in the present inquiry, lived in such inaccessible places that transport was a real problem. They lived 50 miles or more away and attendance meant being absent from home for the greater part of a day. Despite the number of sessions held daily some found it difficult to get away from work: these were usually people engaged in domestic work in hotels and institutions. Much was said about the gossip in waiting rooms, and it is unfortunately true that patients with late syphilis or congenital syphilis who have attended a long time will discourage others. Very occasionally women of doubtful character talked in an unseemly way in front of respectable women. More often the dislike of waiting-room gossip was explained by the dread of being seen there by someone who knew them and might talk about them at home.

Immoral Conduct.—The high extra-marital rate of infection (Table II) was due to the fact that many women were infected during the prolonged absence of their husbands who were serving in the Forces, and allowance must be made for additional temptations to which women are subjected in these circumstances; but a large number were either living a normal married life with their husbands at home or were seeing them at fairly frequent intervals. Twenty had a previous history of venereal disease before they had acquired their current infection: 14 had been infected once, 4 on two occasions, 1 thrice, and 1 on four occasions. Further evidence of their immoral or promiscuous conduct was revealed by the fact that 41 had given birth to illegitimate children. Sixty-six women had histories of promiscuity, and 22 were known to be prostitutes.

Drink, often the inseparable companion of venereal disease, was observed to be a habit of many, and 41 women were regular or heavy drinkers. Police records were not consulted, but it was known that 7 of these defaulters had been convicted in the courts for larceny, disorderly conduct, or child neglect.

The majority of women had very limited interests, and as a refuge from boredom or loneliness sought pleasure in the streets or

public houses and sexual immorality was accepted by them as the price of a " good time " or as part of it. The inescapable deduction from these various facts is that there was conclusive evidence of a grave relaxation of moral control in these women.

Dual and Subsequent Infections.—Although 39 patients (9·7 per cent.) had dual infections of syphilis and gonorrhœa when first examined in this clinic, there was no evidence to prove whether the diseases were concomitantly acquired or not. In this section there were 15 promiscuous women and another 5 known to be prostitutes, and it may well be that the two infections were acquired separately by them. Analyses made periodically in this clinic have shown that the incidence of dual infections at the time of the initial visit varies from 2·5 per cent. to 4 per cent. The relatively high figure (9·7 per cent.) in this series suggests an irresponsibility of conduct which exposed the person to the risk of infection in the first place and led to an unco-operative attitude later when treatment for venereal disease had become necessary.

Dual infections must be distinguished from reinfection, which was not uncommon amongst patients who were suffering from gonorrhœa when they first attended. Thirty-one women were reinfected with gonorrhœa. Reinfection occurred in 21 whilst they were still under treatment for the initial attack, in one during surveillance, and in 9 during the period of their default. Undoubtedly the majority of patients with venereal disease acquired their infections from persons who at the time had not been treated for that attack. On the other hand, a patient under treatment or surveillance, having acquired a new infection, might have infected others before reporting again for treatment.

The Complete Defaulter.—Forty-eight per cent. of complete defaulters were suffering from early syphilis and had received totally inadequate treatment. This figure compares unfavourably with the results of two similar investigations carried out in this department amongst women suffering from contagious syphilis, where 9 per cent. of 242 and 13 per cent. of 372 defaulted completely. It must be remembered, however, that the present series was selected in order to study the problem of default and included many patients carried forward from the previous year.

Conclusions

It is not enough to treat patients for contagious venereal disease ; every effort must be made to find the persons responsible for the infection and persuade them to attend for treatment. This may entail a considerable amount of work for the medico-social department, which is also responsible for checking and following-up default. The busy general practitioner does not have the time or the facilities at his disposal to follow-up default or to locate the source of infection.

The complete defaulter suffering from contagious venereal disease, especially early syphilis, and the pregnant woman with syphilis require serious consideration. Only compulsory legislation will bring back these careless and irresponsible people, and the time for it is long overdue, but compulsory legislation could be supported only if the following conditions were fulfilled :

(a) The diagnosis and treatment of venereal disease should be the responsibility of competent venereologists who would work in clinics with efficient medico-social departments, maintaining close liaison with welfare departments and local authorities.

(b) Adequate buildings situated preferably in polyclinics.

(c) Efficient laboratory facilities.

(d) Legal action should be taken only after reasonable efforts have been made by competent social workers to persuade patients to attend for treatment and when, after attempts to secure co-operation by voluntary means have failed, they have been warned that prosecution will follow.

(e) Propaganda. At present it is not really effective as paper propaganda does not reach, or if reaching does not influence, the sexually promiscuous. Instruction in sex in schools and youth clubs is a more hopeful line of approach. Propaganda needs to be sustained and personal, and should aim not only at preventing infection with venereal disease but at inculcating higher moral standards of conduct.

Summary

Three hundred and eighty-one women suffering from venereal disease defaulted either during treatment or surveillance. No fewer than 172 of these were patients with early

syphilis, 73 per cent. of whom had received very little treatment.

The functions of a medico-social unit in a venereal diseases department are discussed, and efforts to persuade defaulters to co-operate are recorded. In spite of these efforts 55 per cent. proved to be completely unco-operative.

The crude and corrected defaulter rates for syphilis and gonorrhœa are discussed and illustrated.

Various reasons for default are mentioned, but irresponsibility is undoubtedly the chief reason. It would appear that subject to certain qualifications additional legislative measures are clearly necessary to cope with the irresponsible defaulter suffering from transmissible venereal infection.

The help and co-operation of the medico-social staff of the clinic are gratefully acknowledged. For the investigation of the control group in Table V we are indebted to Mr. Linton Snaith, Surgeon in charge, Department of Obstetrics and Gynæcology, Newcastle General Hospital.

CORRESPONDENCE

ARSENICAL ENCEPHALOPATHY

Sir,—I am indebted to Col. Harrison for drawing my attention to a misquotation which appeared in my recent article on arsenical encephalopathy. I would like to take this opportunity, although inadvertently belated, of apologizing for the error. This was due to the fact that in the great welter of international literature from which I had to excerpt views, I had not been able to obtain access to the original texts in many cases and had to rely on the statements made by later annotators. This instance provides an excellent example of the oft repeated dictum, "Always verify your references."

I am, etc.,

E. E. PREBBLE

Canterbury.